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REMARKS

Claims 8-12 are pending in the application. Claim 8 has been amended by the present amendment. The amendment is fully supported by the specification as originally filed.

Applicants' claimed invention is directed to a semiconductor package in which a semiconductor chip is mounted on a substrate and encapsulated by an encapsulant. The encapsulant is fabricated by injecting a molding compound into a molding cavity of a mold, where the molding cavity is formed with a plurality of recess portions **at corner positions thereof**, each recess portion having a smaller height than the molding cavity and connected to an air vent of the mold. As a result, the encapsulant is formed with a plurality of outwardly-extending portions by the molding compound filled in the recess portions (see, e.g., FIG. 3B), and the outwardly-extending portions are located at positions corresponding to the corner positions of the molding cavity.

In the Applicants' invention, as the molding compound flows into the recess portions at corner positions of the molding cavity, due to the relatively small height of the recess portions, the molding compound more rapidly absorbs heat transmitted from the mold, thereby increasing the viscosity and decreasing the flow rate of the molding resin. As a result, the slowed-down molding resin is prevented from flashing out of the air vents.

Claims 8-12 were rejected under 35 USC 103(a) as being unpatentable over "Prior Art Figures 1-2" in view of U.S. Patent 6,173,490 to Lee et al. (hereinafter "Lee"). This rejection is respectfully traversed.

Prior art FIGS. 1 and 2 and Lee fail to teach or suggest a semiconductor package including an encapsulant formed in a molding cavity with a plurality of recess portions formed at **corner positions** thereof, such that the encapsulant is formed with a plurality of outwardly-extending portions located at positions corresponding to the corner positions of the molding cavity.

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Instead, Lee discloses a method for forming a panel of package integrated circuits, where a molding compound passes into a molding cavity with a plurality of ridges 220 that define an array of package recesses 230 within the molding cavity.

In Lee, referring to FIG. 3 as cited in the Office Action, relatively small gaps are formed between the ridges 220 and a surface 410 of the substrate 400; these gaps form flowgates 450 which permit encapsulant and gas to pass through between adjacent package recesses 230 (see column 3, lines 36-42). As understood by those of ordinary skill in the art, the ridges 220 of Lee form a protrusive structure, rather than a recess at a corner position of the molding cavity. Therefore, the ridges 220 of Lee do not constitute "a plurality of recess portions at corner positions" of the molding cavity, as recited in claim 8 of the Applicants' claimed invention. It is evident that the ridges and flowgates of Lee are provided to accommodate formation of multiple integrated circuit packages, the flowgates being removed after a degating process, where a subsequent singulation process would separate the packages by cutting along the grooves 670 (see, e.g., column 5, line 63 to column 6, line 11; column 4, lines 3-5).

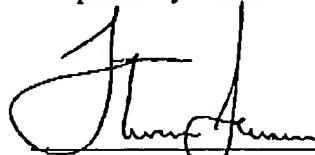
On page 3 of the Office Action, Lee was cited as teaching "recess portions (above line A) connected to the air vent 290..." However, such "recess portions" form a marking structure 500 to facilitate orientation (see column 4, lines 31-44), but are not formed at corner positions of the molding cavity and connected to air vents.

Even if Lee were somehow combined with Prior Art FIGS. 1 and 2, the combination fails to teach or suggest a plurality of recessed portions formed at corner positions of a molding cavity, such that encapsulant is formed with a plurality of outwardly-extending portions located at positions corresponding to the corner positions of the molding cavity, for at least the reasons discussed above.

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It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

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